INTERNATIONAL SEARCH REPORT TCT/EP2004/005376 A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B01J2/16 B01J B01J8/28 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 B01J Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category ° Relevant to claim No. US 2 635 684 A (MANDEVILLE JOSCELYNE X FRANCIS) 21 April 1953 (1953-04-21) 1-6 Υ column 2, line 38 - column 3, line 17; 7-10 figure US 5 213 820 A (UHLEMANN HANS ET AL) Υ 25 May 1993 (1993-05-25) 7-10 column 4, line 24 - line 35; figure 1 EP 1 312 410 A (FREUND IND CO LTD) Α 21 May 2003 (2003-05-21) 1-10 column 9, line 27 - column 12, line 10; figure 1 -/--

Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.				
Special categories of cited documents: A' document defining the general state of the art which is not considered to be of particular relevance E' earlier document but published on or after the international filing date L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O' document referring to an oral disclosure, use, exhibition or other means P' document published prior to the international filling date but later than the priority date claimed Oate of the actual completion of the international search	 "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family 				
14 September 2004	Date of mailing of the international search report 21/09/2004				
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Authorized officer				
Form PCT/ISA/210 (second sheet) (January 2004)	Cubas Alcaraz, J				

INTERNATIONAL SEARCH REPORT

TCT/EP2004/005376

C.(Continue	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	TCT/EP2004/005376		
Category °	Citation of document, with indication, where appropriate, of the relevant passages			
	The relevant passages	Relevant to claim No.		
Α	US 3 036 338 A (HERMAN NACK)	1-10		
i	29 May 1962 (1962-05-29)	1-10		
	column 5, line 65 - column 8, line 26; figure 1			
_	~~~~			
A	US 4 946 653 A (STOPP GERHARD ET AL)	1-10		
	7 August 1990 (1990-08-07) column 1, line 60 - column 3, line 13;			
	figure 1			
	• •			
]				
į				
ļ		[
		1		
[1		
1				
ļ				
Ì				
		1		
1				
1				
1				
1		·		
]				
		1		
		1		
		1		
		}		
}				
j				
		· ·		
}				
•		1		
-				
1				
PCT/ISA/210	(continuation of second sheet) (January 2004)			

INTERNATIONAL SEARCH REPORT

TCT/EP2004/005376

Data de la				101/112004/0033/0			
cited	atent document d in search report		Publication date		Patent family member(s)		Publication date
US	2635684	A	21-04-1953	NONE			
US	5213820	Α	25-05-1993	DE DE EP JP JP	3808277 58900108 0332929 1274832 2811578	D1 A1 A	21-09-1989 13-06-1991 20-09-1989 02-11-1989 15-10-1998
EP	1312410	A	21-05-2003	JP EP WO US	2002018266 / 1312410 / 0183098 / 2003190417 /	A1 A1	22-01-2002 21-05-2003 08-11-2001 09-10-2003
US	3036338	Α	29-05-1962	NONE			
US	4946653	A	07-08-1990	DE DE EP ES JP JP JP	3206236 / 3360248 [0087039 / 8400891 / 1604366 (2026536 E 58170534 / 162274 /	D1 A1 A1 C B A	01-09-1983 18-07-1985 31-08-1983 16-02-1984 22-04-1991 11-06-1990 07-10-1983 19-04-1991